Message

From: Praskins, Wayne [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=4F47BC0A2C2E42A98347D59CD1A98B19-WPRASKIN]
Sent: 4/30/2021 9:13:19 PM
To: Hays, David C Jr CIV USARMY CENWK (USA) [David.C.Hays@usace.army.mil]
Subject: RE: HPNS BUILD Direct Ingestion Results

Dave –

Yes, I see in your spreadsheet that the proposed Navy ingestion rate is 4 to 17 times lower than a weighted average calculated from EFH values.

I did a similar comparison to the default rate in the BPRG calculator. If I did the calculation right, the average BPRG ingestion rate is about 0.002 m2/hr.

My calculation of the average BPRG IR: [3,200,400 cm2]/[1m2/10,000 cm2 * 26 years * 350 days/year * 16 hours/day] The 3,200,400 cm2 value is from the BPRG Users Guide.

But isn't the Navy making the argument that the EFH and BPRG rates are too high because they use up the source in less than the 26 year exposure period? Hence their calculation of the 8.1 x 10-6 hr-1 rate?

Wayne Praskins | Superfund Project Manager
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From: Hays, David C Jr CIV USARMY CENWK (USA) <David.C.Hays@usace.army.mil>
Sent: Friday, April 30, 2021 11:01 AM
To: Praskins, Wayne <Praskins.Wayne@epa.gov>
Subject: RE: HPNS BUILD Direct Ingestion Results

Wayne, I do not believe the Navy has calculated the ingestion rate correctly. Depending on CTE or RME a factor of 4 to 17 low compared to EFH. Please see my calc in the attached and note that I did verify it works with default RESRAD assumptions (got same answer as noted in RESRAD manual). I want to verify 1 thing with RESRAD but in the meantime please let me know if you or your risk assessor have any thoughts or comments.

Have a great weekend
Dave

From: Praskins, Wayne <Praskins.Wayne@epa.gov>
Sent: Thursday, April 22, 2021 4:49 PM
To: Hays, David C Jr CIV USARMY CENWK (USA) <David.C.Hays@usace.army.mil>
Subject: [Non-DoD Source] FW: HPNS BUILD Direct Ingestion Results

Dave –

Just got this from the Navy. They say they have run RESRAD BUILD with the modified inputs/assumptions we requested (direct rather than indirect ingestion, modified ingestion rate, and source expanded to floor and lower walls) and a clearer/more defensible conversion to risk.

If I understand correctly, rather than use RESRAD BUILD to generate risk values, they used RESRAD BUILD to estimate dose then applied isotope-specific DCFs in the spreadsheet to generate risk estimates.

You'll see in a note in the first tab that they calculate an ingestion rate based on depletion of source during the exposure period. They are using a value of 8.1 x 10-6 hr-1. (Can this value be compared to the EPA/BPRG ingestion rate in units of area/time?)

It looks like they also assumed no dissipation of the source (other than through ingestion?) and zeroed out loss of radon.

Can you take a look? Do you have a few minutes to discuss Monday or Tuesday? Thanks.

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From: Robinson, Derek J CIV USN NAVFAC SW SAN CA (USA) <derek.j.robinson1@navy.mil>
Sent: Thursday, April 22, 2021 2:04 PM
To: Praskins, Wayne <Praskins.Wayne@epa.gov>
Subject: HPNS BUILD Direct Ingestion Results

Hi Wayne,

As discussed. attached is a file with RESRAD inputs and results.

Before we send you all of the RESRAD output files, we wanted to walk you through this and make sure that changes are not needed.

I will schedule a meeting for Tuesday next week. Please let me know your availability and/or if another day works better.

Best Regards,

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